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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/837,850	04/19/2001	Edward Vincent Louis	CE08635R	1702

22917 7590 07/02/2002

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EXAMINER

NGUYEN, KHANH V

ART UNIT PAPER NUMBER

2817

DATE MAILED: 07/02/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/837,850

Applicant(s)

LOUIS ET AL.

Examiner

Khanh V. Nguyen

Art Unit

2817

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 10-12, 18-20, 23 and 24 is/are rejected.
- 7) ☒ Claim(s) 5-9, 13-17, 21, 22 and 25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

Claims 4, 12 are objected to because of the following informalities:

"a power detector" should be replaced with --a peak power detector--.

Appropriate correction is required.

Claim 12, line 2, after word "energy" inserted word "of".

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 1-4, 10-12, 18-20, 23, 24 are rejected under 35 U.S.C. 102(e) as being anticipated by Ghannouchi et al. (6,275,105).

Regarding claim 1, Ghannouchi et al. (Fig. 1) discloses a feed-forward amplifier for distortion reduction in the output (27) comprising: an input signal (12), main amplifier (6) amplified input signal (12) and produces amplified signal (19), an error amplifier (3) amplified error signal (21) and produces amplified error signal (31), and wherein the

Art Unit: 2817

[amplifier error signal (31) is inherently seen comprising an error signal component and an error signal distortion component] a controller (11) together with detector (23) read as a control circuit receiving a portion of error signal (21) via coupler (22) and produced a control signal which is capable of controlling peak power level.

Regarding claim 2, wherein controller (11) is controlling amplitude (8) and phase (9) of input signal.

Regarding claim 3, wherein detector (23) detects power of a portion of error signal (21) via coupler (22) and portion of error signal detected is fed into controller (11) and produces the control signal based on power detected.

Regarding claim 4, wherein controller (11) together with detector (23) read as a control circuit, and detector (23) is capable of function as peak power detector and wherein controller (11) is controlling amplitude (8) and phase (9) of input signal.

Regarding claim 10, Ghannouchi et al. (Fig. 1) discloses a feed-forward amplifier for distortion reduction in the output (27) comprising: a main signal path read on components (10, 7, 6, 17, 28, 29) receiving input signal (12), coupler (10) samples input signal (12) to produce attenuated input signal (5) to a feed forward correction circuit, main amplifier (6) amplified input signal (12) to produce amplified signal (19) having distortion component, a coupler (17) samples amplified signal to produce amplified attenuated signal (36) to a feed forward correction circuit; a feed forward correction circuit read on components (15, 14, 22, 24, 3) coupled to the main signal path receives the attenuated input signal (5) and the attenuated amplified signal (36) from the main signal path at combiner (14), produces an error signal (21) based on the attenuated

Art Unit: 2817

signals, an error amplifier (3) amplified error signal (21) and produced amplified error signal (31), and wherein the amplifier error signal (31) is inherently seen comprising an error signal component and an error signal distortion component, coupler (22) samples error signals (21) to produce attenuated error signal to a control circuit; controller (11) together with detector (23) read as a control circuit coupled to main signal path and feed forward correction circuit receives the attenuated error signal from the feed forward correction circuit and produces a control signal which is capable of controlling peak power level and controller (11) is controlling amplitude (8) and phase (9) of input signal in the main signal path.

Regarding claim 11, wherein detector (23) detects power of a portion of attenuated error signal (21) via coupler (22) and portion of attenuated error signal detected is fed into controller (11) and produces the control signal based on power detected.

Regarding claim 12, wherein controller (11) together with detector (23) read as a control circuit, and detector (23) is capable of function as peak power detector.

Regarding claims 18-20, these method claims are inherently seen in claims 10-12.

Regarding claim 23, Ghannouchi et al. (Fig. 3) discloses a feed-forward amplifier for distortion reduction in the output (27) comprising steps of: receiving input signal (12), main amplifier (6) amplified input signal (12) to produce amplified signal (19), an error amplifier (3) amplified error signal (21) and produced amplified error signal (31), and wherein the amplifier error signal (31) is inherently seen comprising an error component

Art Unit: 2817

and a distortion component, and a controller (32) produces a control signal is inherently seen based on the distortion component of the amplified error signal (31).

Regarding claim 24, Ghannouchi et al. (Fig. 3) further comprising steps of: coupler (10) samples input signal (12) to produce attenuated input signal (5), a coupler (17) samples amplified signal to produce amplified attenuated signal (36), the attenuated input signal (5) and the attenuated amplified signal (36) is combined at combiner (14) and produces an error signal (21).

Allowable Subject Matter

Claims 5-9, 13-17, 21, 22, 25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 5-9, no prior teaches a control circuit further receives a portion of amplified error signal and the functions as disclosed in claim 5.

Regarding claims 13-17, 21, 22, 25, no prior teaches apparatus and method of sampling amplified error signal to produce attenuated amplified error signal and the functions as disclosed in claims 13, 21 and 25.

Art Unit: 2817

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additional reference (Myer (6,069,31)) shows further analogous prior art circuitry.

This art is deemed relevant and should be carefully reviews before any amendment is filed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh V. Nguyen whose telephone number is (703) 306-9058. The examiner can normally be reached from 8:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (703) 308-4909. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Customer Service at (703) 872-9317.

NKV

06/28/02

A handwritten signature in black ink, appearing to read 'Khanh Van Nguyen', with a horizontal line drawn underneath it.

Nguyen, Khanh Van

Group 2800, Art Unit 2817